It is clear from the above list that all the birds killed are of resident species. Sálim Ali (1962) and Gee (1964) have recorded similar phenomenon in Jatinga near Haflong, where petromax lamps are used by the villagers to attract birds. In both the places two common observations are made: that (i) almost all the species are resident birds; and (ii) green pigeons (Treron sp.) in considerable numbers are reported to be attracted by light. Although some of these birds namely, Emerald Dove, Greyfronted Green pigeon, Three-toed Forest kingfisher and Indian Ruddy kingfisher are known to dash against ob-

Zoological Survey of India, Eastern Regional Station, Shillong-3, November 4, 1977. stacles and die, it is not still clearly understood why these 'non migratory' birds fly into the lights and that too in one particular time of the year and in a particular place or two alone.

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9. NOTES ON DISTRIBUTION, SEXUAL DIMORPHISM AND GROWTH IN CAPTIVITY OF *GEOCHELONE ELONGATA* (BLYTH)

(With a text-figure)

Distribution: This species is so far known to occur in India from Jalpaiguri district, E. Bengal and Singbhum district, Bihar (Chaibassa and Chotanagpur) as recorded in the collection of Zoological Survey of India excluding the female specimen from Orissa mentioned below. Outside India the species occurs

in Nepal, Bangladesh (Akyab and Chittagong Hill tracts), Burma, Thailand. According to Smith (1931)¹ Nepal is the north eastern limit of the range of the species in the Indian

¹ Smith, M. A. (1931): The Fauna of British India. Vol. I.

subcontinent. This is an example of an Indochinese species in Peninsular India. This common land tortoise of eastern India is becoming rare with the restriction of Sal forest.

Habits and habitats: Two specimens were collected from the forest floor of hill "Sal" forests while moving among the dry Sal leaves. Their preference for fallen flower petals within the enclosure suggests that they possibly feed on fallen Sal flowers in nature. Their distribution also is closely associated with the Sal (Shorea robusta) and Teak (Tectona grandis) forests of the Indian and Indochinese subregion. In winter they are less active than in the summer or rainy season.

Sexual dimorphism: The distinguishing characters of this species are prominent. The

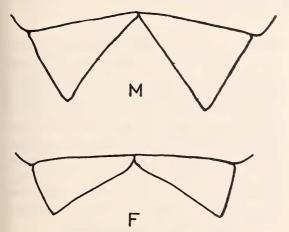


Fig. 1. Geochelone elongata Blyth.

Life size figure showing the anal bifurcation in male (M) and female (F).

body of the male is comparatively narrower and deeper than the females. The nuchal shield as well as the angle of bifurcation of anal shields (plastron) (Text-fig. 1) in male are much narrower and also the tail is longer and more curved than in the female. In rare cases the nuchal may be absent. Smith (loc. cit.) found the nuchal wanting in one out of 60 specimens and Anderson in 4 specimens. There is no colour difference. The shell is greenishyellow or yellow and each shield has a irregular black blotch. In our specimen's shell this blotch is wanting.

Growth: Measurements and weight were taken of the male and female on 27-1-74 and after a gap of two years the male was measured and weighed on 27-1-77 and 23-1-78. From the size and weight it is presumed that both were of the same age group but the male is slightly larger. The annual weight gain by the male was more in the 4th year (245 gm) than in its 2nd year (150 gm). The following measurements indicate that the growth of the species is very slow in captivity:

Food: The two tortoises were fed everyday on cut pieces of Banana, "Sag" or vegetables, soaked Bengal gram, "Doob" grass (Cynodon dactylon). They took all these food and also petals of flowers fallen inside the enclosure.

Breeding season: The breeding season appears to start in the month of July because the male was observed to try and mate twice on 7.7.77 and 9.7.77 with a female G. elegans.

The female reported herein was collected

Sex	9	8	ô		the Miles of the Control
Dt. of measurement	27-1-74	27-1-74	25-1-75	23-1-76	23-1-78
Length of carapace in mm.	220	238	_	242	244
Breadth of carapace	154	148		166	168
Length of Plastron	190	192		195	197
Weight in Kg.	1.675	1.770	1.920	2.105	2.350
Depth of body	103	112			